In the claims:

## 1. (currently amended): A metal complex of the following formula

$$R^{1}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{6}$ 
(I), wherein

Me is a transition metal of Sub-Group 7, 8, 9, 10, 11 or 12, preferably 9, 10 or 11,

D<sup>1</sup> and D<sup>2</sup> are each independently of the other a carbocyclic or heterocyclic ring or ring system, which may be unsubstituted or substituted by one or more groups R<sup>5</sup> and R<sup>6</sup>,

R<sup>1</sup> and R<sup>4</sup> are each independently of the other a hydrogen atom, a perfluoroalkyl radical, an unsubstituted or substituted alkyl radical, an aryl radical or an aralkyl radical,

R<sup>2</sup> and R<sup>3</sup> are a cyano group, or

R<sup>2</sup> and R<sup>3</sup> together form a five to seven membered heterocyclic ring, or

R<sup>2</sup> and R<sup>3</sup> together form an aromatic carbocyclic ring, which is substituted by at least one electron accepting substituent, or which is substituted by at least one electron donating substituent,

R<sup>5</sup> and R<sup>6</sup> being a halogen atom, such as fluorine, chlorine or bromine, a group -NR<sup>8</sup>R<sup>9</sup>, a group -SO₂NR<sup>8</sup>R<sup>9</sup>, wherein

 $R^8$  and  $R^9$  are each independently of the other a hydrogen atom, an alkyl group, a  $C_{1-}$   $C_{24}$ alkylcarbonyl group, an alkyl group which is substituted by E and/or interrupted by D, a  $C_{6-24}$ aryl-carbonyl radical or  $C_{7-24}$ aralkyl-carbonyl radical, an aryl group, or an aralkyl group, or  $R^8$  and  $R^9$  together form a five- to seven-membered heterocyclic ring, which optionally can be interrupted by D,

a nitro group, a cyano group, a hydroxy group, an alkyl group, an alkyl group which is substituted by E and/or interrupted by D, an aryloxy group, an aralkyloxy group, an alkylthio group which is substituted by E and/or interrupted by D, an arylthio group, an aralkylthio group, an acyl radical, a phenyl group, an ester group, such as a phosphonic acid, phosphoric acid or carboxylic acid ester

group,—a carboxamide group, a sulfamide group, an ammonium group, a carboxylic acid, sulfonic acid, phosphonic acid or phosphoric acid group or a salt thereof,

wherein at least one of the substituents R<sup>5</sup> and at least one of the substituents R<sup>6</sup> is an electron donating group, if R<sup>2</sup> and R<sup>3</sup> together form an aromatic carbocyclic ring, which is substituted by at least one electron accepting substituent,

or at least one of the substituents R<sup>5</sup> and at least one of the substituents R<sup>6</sup> is an electron accepting group, if R<sup>2</sup> and R<sup>3</sup> together form an aromatic carbocyclic ring, which is substituted by at least one electron donating substituent, wherein

R<sup>10</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently of the other a hydrogen atom, an alkyl group, an aryl group, or an aralkyl group,

R<sup>11</sup> is a hydrogen atom, an alkyl group, an aryl group, or an aralkyl group,

R<sup>14</sup> is an alkyl group, an aryl group, or an aralkyl group, and

R<sup>15</sup> is a hydrogen atom, an alkyl group, an aryl group, or an aralkyl group, with the proviso that the following compounds are excluded:

2. (currently amended): A metal complex according to claim 1, having the following formula

Me is Co<sup>3+</sup>, especially Cu<sup>2+</sup>, Ni<sup>2+</sup>, Pd<sup>2+</sup>, Pt<sup>2+</sup>, Co<sup>2+</sup>, or Zn<sup>2+</sup>,

X is >0, >S, >S=0, or  $>SO_2$ ,

A<sup>1</sup>, A<sup>4</sup>, A<sup>5</sup> and A<sup>6</sup> are each independently of the other a hydrogen atom, an alkoxy radical, an alkyl radical which is interrupted one or more times by -O- or by -S-,

at least one of A<sup>2</sup> and A<sup>3</sup>, preferably A<sup>2</sup>-and A<sup>3</sup>, are-<u>is</u> an electron accepting substituent, especially –NO<sub>2</sub>, a halogen atom, especially a chlorine or a bromine atom, a group -SO<sub>2</sub>-NR<sup>8</sup>R<sup>9</sup> and the other is a hydrogen atom,

R<sup>1</sup> and R<sup>4</sup> are defined as in claim 1,

R<sup>51</sup>, R<sup>52</sup>, R<sup>54</sup>, R<sup>61</sup>, R<sup>62</sup> and R<sup>64</sup> are each independently of the other a hydrogen atom, or an C<sub>1</sub>-C<sub>18</sub>alkyl group,

 $R^{53}$  and  $R^{63}$  are each independently of the other a hydroxy group, an  $C_1$ - $C_{18}$ alkoxy group, an  $C_6$ - $C_{24}$ aryloxy group, an  $C_7$ - $C_{24}$ aralkyloxy group, a group  $-NR^8R^9$  [[,]] or a salt thereof, wherein  $R^8$  and  $R^9$  are each independently of the other a hydrogen atom, an  $C_1$ - $C_{18}$ alkyl group, an  $C_1$ - $C_{18}$ alkyl group which is substituted by E and/or interrupted by D, an  $C_6$ - $C_{24}$ aryl group, or an  $C_7$ - $C_{24}$ aralkyl group, wherein D and E are as defined in claim 1,

or

R<sup>53</sup> and R<sup>52</sup>, R<sup>53</sup> and R<sup>54</sup>, R<sup>63</sup> and R<sup>62</sup>, and/or R<sup>63</sup> and R<sup>64</sup> are each independently of the other

wherein  $A^{10}$ ,  $A^{10'}$ ,  $A^{11}$ ,  $A^{11'}$ ,  $A^{12}$  and  $A^{12'}$  are each independently of the other a hydrogen atom, or a  $C_1$ - $C_8$ alkyl group,

or

 $A^{10'}$  and  $A^{11'}$  together, form a double bond, and  $A^{13}$  is a hydrogen atom or a  $C_1$ - $C_8$ alkyl group,

or

 $\mathsf{R}^{53}$  and  $\mathsf{R}^{52}$  and  $\mathsf{R}^{54}$ , and/or  $\mathsf{R}^{63}$  and  $\mathsf{R}^{62}$  and  $\mathsf{R}^{64}$  are

wherein  $A^{14}$ ,  $A^{14'}$ ,  $A^{15'}$ ,  $A^{15'}$ ,  $A^{17'}$ ,  $A^{18}$ ,  $A^{18'}$ ,  $A^{19}$ ,  $A^{19'}$ ,  $A^{20}$  and  $A^{20'}$  are each independently of the other a hydrogen atom, or a  $C_1$ - $C_8$ alkyl group,

R<sup>55</sup> and R<sup>65</sup> are each independently of the other a hydrogen atom, or a C<sub>1</sub>-C<sub>18</sub>alkyl group,

 $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $R^{59}$ ,  $R^{66}$ ,  $R^{67}$ ,  $R^{68}$  and  $R^{69}$  are each independently of the other a hydrogen atom, a  $C_1$ - $C_{18}$ alkyl group, or a  $C_1$ - $C_{18}$ alkyl group, which is interrupted by one or more oxygen atoms, and

X<sup>4</sup> and X<sup>5</sup> are each independently of the other a sulfur, or oxygen atom.

3. (currently amended): A metal complex according to claim 2 having the formula II,

III, or IV, wherein

Me is Co<sup>3+</sup>, especially-Cu<sup>2+</sup>, Ni<sup>2+</sup>, Pd<sup>2+</sup>, Pt<sup>2+</sup>, Co<sup>2+</sup>, or Zn<sup>2+</sup>,

X is >0, >S, >S=0, or  $>SO_2$ ,

A<sup>1</sup>, A<sup>4</sup>, A<sup>5</sup> and A<sup>6</sup> are a hydrogen atom,

 $A^2$  and  $A^3$  are  $-NO_2$ ,

 $R^1$  and  $R^4$  are each independently of the other a hydrogen atom, a perfluoro $C_1$ - $C_8$ alkyl radical or a  $C_1$ - $C_8$ alkyl radical,

 $R^{51}$ ,  $R^{52}$ ,  $R^{54}$ ,  $R^{61}$ ,  $R^{62}$  and  $R^{64}$  are a hydrogen atom,

or

 $R^{51}$  and  $R^{52}$  together, and/or  $R^{61}$  and  $R^{62}$  together, form an unsubstituted or substituted phenyl ring,

 $R^{53}$  and  $R^{63}$  are each independently of the other a hydroxy group, an  $C_1$ - $C_{18}$ alkoxy group, a group -NR<sup>8</sup>R<sup>9</sup>, wherein R<sup>8</sup> and R<sup>9</sup> are each independently of the other a hydrogen atom, an  $C_1$ - $C_{18}$ alkyl group, a group -(CH<sub>2</sub>)<sub>n</sub>-OH, a group -(CH<sub>2</sub>CH<sub>2</sub>O)<sub>n</sub>-R<sup>16</sup>, where n is a number from the range 1-9 and R<sup>16</sup> is H or  $C_1$ - $C_{10}$ alkyl, or a salt thereof,

or

 $R^{53}$  and  $R^{52}$ ,  $R^{53}$  and  $R^{64}$ ,  $R^{63}$  and  $R^{62}$ , and/or  $R^{63}$  and  $R^{64}$  are each independently of the other

wherein  $A^{10}$ ,  $A^{10}$ ,  $A^{11}$ ,  $A^{11}$ ,  $A^{12}$  and  $A^{12}$  are each independently of the other a hydrogen atom, or a  $C_1$ - $C_8$ alkyl group,

or

 $A^{10'}$  and  $A^{11'}$  together, form a double bond,  $A^{13}$  is a hydrogen atom or a  $C_1$ - $C_8$ alkyl group,

or

 $R^{53}$  and  $R^{52}$  and  $R^{54},$  and/or  $R^{63}$  and  $R^{62}$  and  $R^{64}$  are

wherein  $A^{14}$ ,  $A^{14'}$ ,  $A^{15}$ ,  $A^{15'}$ ,  $A^{17'}$ ,  $A^{18'}$ ,  $A^{18'}$ ,  $A^{19}$ ,  $A^{19'}$ ,  $A^{20}$  and  $A^{20'}$  are each independently of the other a hydrogen atom, or a  $C_1$ - $C_8$ alkyl group.

## 4. (currently amended): A metal complex according to claim 3, having the formula

$$R^{52} \longrightarrow R^{64} \longrightarrow R^{62} \longrightarrow R^{62} \longrightarrow R^{65} \longrightarrow R^{65} \longrightarrow R^{65} \longrightarrow R^{65} \longrightarrow R^{65} \longrightarrow R^{66} \longrightarrow R$$

$$R^{52}$$
 $R^{53}$ 
 $R^{54}$ 
 $R^{64}$ 
 $R^{62}$ 
 $R^{63}$ 
 $R^{64}$ 
 $R^{63}$ 
 $R^{64}$ 
 $R^{65}$ 
 $R^{65}$ 

wherein X<sup>1</sup> is a group -O-, -S-, or -NR<sup>200</sup>-, wherein R<sup>200</sup> is a hydrogen atom, or an alkyl group,

 $R^{55}$  and  $R^{65}$  are each independently of the other a hydrogen atom, or a  $C_1$ - $C_{18}$ alkyl group,

 $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $R^{59}$ ,  $R^{66}$ ,  $R^{67}$ ,  $R^{68}$  and  $R^{69}$  are each independently of the other a hydrogen atom, a  $C_1$ - $C_{18}$ alkyl group, or a  $C_1$ - $C_{18}$ alkyl group, which is interrupted by one or more oxygen atoms,

$$R^{52}$$
 $R^{54}$ 
 $R^{64}$ 
 $R^{62}$ 
 $R^{63}$ 
(IVc), or

$$R^{52}$$
 $R^{54}$ 
 $R^{64}$ 
 $R^{63}$ 
 $R^{63}$ 
(IVd),

wherein

Me is Co<sup>3+</sup>, especially-Cu<sup>2+</sup>, Ni<sup>2+</sup>, Pd<sup>2+</sup>, Pt<sup>2+</sup>, Co<sup>2+</sup>, or Zn<sup>2+</sup>,

 $R^1$  is hydrogen and  $R^4$  is  $C_1$ - $C_4$ perfluoroalkyl,

 $R^{52}$ ,  $R^{54}$ ,  $R^{62}$  and  $R^{64}$  are a hydrogen atom.

or

 $R^{53}$  and  $R^{63}$  are each independently of the other a hydroxy group, an  $C_1$ - $C_{18}$ alkoxy group, a group -NR<sup>8</sup>R<sup>9</sup>, wherein R<sup>8</sup> and R<sup>9</sup> are each independently of the other a hydrogen atom, an  $C_1$ - $C_{18}$ alkyl group, a group -(CH<sub>2</sub>)<sub>n</sub>-OH, a group (CH<sub>2</sub>CH<sub>2</sub>O)<sub>n</sub>-R<sup>16</sup>, where n is a number from the range 1-9 and R<sup>16</sup> is H or  $C_1$ - $C_{10}$ alkyl, or a salt thereof,

or

R<sup>53</sup> and R<sup>52</sup>, R<sup>53</sup> and R<sup>54</sup>, R<sup>63</sup> and R<sup>62</sup>, and/or R<sup>63</sup> and R<sup>64</sup> are each independently of the other a group of formula

wherein

 $A^{13} \, a$  hydrogen atom or a  $C_1\text{-}C_8 alkyl group,$ 

or  $R^{53}$  and  $R^{52}$  and  $R^{54}$ , and/or  $R^{63}$  and  $R^{62}$  and  $R^{64}$  are a group of formula

## 5. (currently amended): A metal complex according to claim 4 of the following structure:

Compound	$R^{53} = R^{63}$	Me
A-1	-N(CH₂)₂OH	Ni <sup>2+</sup>
A-2	-N(CH₂)₂OH	Cu <sup>2+</sup>
A-3	-N(CH₂)₂OH	Co <sup>2+</sup>
A-4	-ОН	Ni <sup>2+</sup>
A-5	-ОН	Cu <sup>2+</sup>
A-6	-OH	Co <sup>2+</sup>
A-7	-ONa	Ni <sup>2+</sup>
A-8	-ONa	Cu <sup>2+</sup>
A-9	-ONa	Co <sup>2+</sup>

Compound	ompound $R^{53} = R^{63}$ Me	
B-1	-N(CH₂)₂OH	Ni <sup>2+</sup>
B-2	-N(CH₂)₂OH	Cu <sup>2+</sup>
B-3	-N(CH₂)₂OH	Co <sup>2+</sup>
B-4	-OH	Ni <sup>2+</sup>
B-5	-OH	Cu <sup>2+</sup>
B-6	-OH	Co <sup>2+</sup>
B-7	-ONa	Ni <sup>2+</sup>
B-8	-ONa Cu <sup>2+</sup>	
B-9	-ONa Co <sup>2+</sup>	
B-10	-ONH₄	Ni <sup>2+</sup>
B-11	-ONH₄	Cu <sup>2+</sup>
B-12	-ONH₄	Co <sup>2+</sup>

B-13 (Me = 
$$Ni^{2+}$$
)

B-16 (Me = 
$$Ni^{2+}$$
)

B-17 (Me = 
$$Cu^{2+}$$
)

B-18 (Me = 
$$Co^{2+}$$
)

B-19 (Me = 
$$Ni^{2+}$$
)

B-20 (Me = 
$$Cu^{2+}$$
)

B-21 (Me = 
$$Co^{2+}$$
)

Compound	$R^{53} = R^{63}$	Me
C-1	-N(CH₂)₂OH	Ni <sup>2+</sup>
C-2	-N(CH₂)₂OH	Cu <sup>2+</sup>
C-3	-N(CH₂)₂OH	Co <sup>2+</sup>

C-4	-OH	Ni <sup>2+</sup>
C-5	-OH	Cu <sup>2+</sup>
C-6	-OH	Co <sup>2+</sup>

C-7 (Me = 
$$Ni^{2+}$$
)  
C-8 (Me =  $Cu^{2+}$ )

C-9 (Me =  $Co^{2+}$ )

C-10 (Me = 
$$Ni^{2+}$$
)  
C-11 (Me =  $Cu^{2+}$ )  
C-12 (Me =  $Co^{2+}$ )

C-13 (Me = 
$$Ni^{2+}$$
)  
C-14 (Me =  $Cu^{2+}$ )  
C-15 (Me =  $Co^{2+}$ )

$$\mathbb{R}^{53}$$

$$\mathbb{R}^{53}$$

$$\mathbb{R}^{63}$$

Compound	$R^{53} = R^{63}$	Me
D-1	-N(CH <sub>2</sub> ) <sub>2</sub> OH	Ni <sup>2+</sup>
D-2	-N(CH₂)₂OH	Cu <sup>2+</sup>
C-3	-N(CH₂)₂OH	Co <sup>2+</sup>
D-4	-OH	Ni <sup>2+</sup>

D-5	-OH	Cu <sup>2+</sup>
D-6	-OH	Co <sup>2+</sup>

D-7 (Me = 
$$Ni^{2+}$$
)  
D-8 (Me =  $Cu^{2+}$ )  
D-9 (Me =  $Co^{2+}$ )

D-10 (Me = 
$$Ni^{2+}$$
)  
D-11 (Me =  $Cu^{2+}$ )  
D-12 (Me =  $Co^{2+}$ )

D-13 (Me = 
$$Ni^{2+}$$
)  
D-14 (Me =  $Cu^{2+}$ )  
D-15 (Me =  $Co^{2+}$ )

D-16 (Me = 
$$Ni^{2+}$$
)  
D-17 (Me =  $Cu^{2+}$ )  
D-18 (Me =  $Co^{2+}$ )

Compound	mpound $R^{53} = R^{63}$ Me	
E-1 -N(CH <sub>2</sub> ) <sub>2</sub> O		Ni <sup>2+</sup>
E-2	-N(CH₂)₂OH	Cu <sup>2+</sup>
E-3	-N(CH <sub>2</sub> ) <sub>2</sub> OH	Co <sup>2+</sup>
E-4	-OH	Ni <sup>2+</sup>
E-5	-OH	Cu <sup>2+</sup>
E-6	-OH	Co <sup>2+</sup>

E-7 (Me = 
$$Ni^{2+}$$
)

E-8 (Me = 
$$Cu^{2+}$$
)

E-9 (Me = 
$$Co^{2+}$$
)

E-10 (Me = 
$$Ni^{2+}$$
)

E-11 (Me = 
$$Cu^{2+}$$
)

E-12 (Me = 
$$Co^{2+}$$
)

Compound	$R^{53} = R^{63}$	Me
F-1	-N(CH <sub>2</sub> ) <sub>2</sub> OH	Ni <sup>2+</sup>
F-2	-N(CH <sub>2</sub> ) <sub>2</sub> OH	Cu <sup>2+</sup>
F-3	-N(CH₂)₂OH	Co <sup>2+</sup>
F-4	-OH	Ni <sup>2+</sup>
F-5	-OH	Cu <sup>2+</sup>
F-6	-OH	Co <sup>2+</sup>

F-7 (Me = 
$$Ni^{2+}$$
)  
F-8 (Me =  $Cu^{2+}$ )  
F-9 (Me =  $Co^{2+}$ )

F-13 (Me =  $Ni^{2+}$ ) F-14 (Me =  $Cu^{2+}$ ) F-15 (Me =  $Co^{2+}$ )

$$\begin{array}{c|c}
 & \text{NC} & \text{CN} \\
 & \text{R}^{71} & \text{N} & \text{N} & \text{R}^{71} \\
 & \text{NC} & \text{O} & \text{O} & \text{CN} \\
 & \text{O} & \text{R}^{72} & \text{R}^{72} & \text{O}
\end{array}$$

Compound	R <sup>71</sup>	R <sup>72</sup>	Me
G-1	-CH₃	-CH <sub>3</sub>	Ni <sup>2+</sup>
G-2	-CH₃	-CH <sub>3</sub>	Cu <sup>2+</sup>
G-3	-CH <sub>3</sub>	-CH <sub>3</sub>	Co <sup>2+</sup>
G-4	-CH₃	-(CH <sub>2</sub> ) <sub>3</sub> OCH(CH <sub>3</sub> ) <sub>2</sub>	Ni <sup>2+</sup>
G-5	-CH₃	-(CH <sub>2</sub> ) <sub>3</sub> OCH(CH <sub>3</sub> ) <sub>2</sub>	Cu <sup>2+</sup>
G-6	-CH <sub>3</sub>	-(CH <sub>2</sub> ) <sub>3</sub> OCH(CH <sub>3</sub> ) <sub>2</sub>	Co <sup>2+</sup>
G-7	-CH <sub>3</sub>	Н	Ni <sup>2+</sup>
G-8	-CH₃	Н	Cu <sup>2+</sup>
G-9	-CH₃	Н	Co <sup>2+</sup>

H-1 (Me = 
$$Ni^{2+}$$
)  
H-2 (Me =  $Cu^{2+}$ )  
H-3 (Me =  $Co^{2+}$ )

## 6. (currently amended): A composition, comprising

- (a) a metal complex according to any one of claim [[s]] 1-to-5, and
- (b) a dye.
- 7. (original): A composition according to claim 6, wherein

Me in formula I, II, III or IV is Ni<sup>2+</sup>, Cu<sup>2+</sup>, or Co<sup>2+</sup> and the dye is a oxonol dye of formula

wherein  $D^1$ ,  $D^2$ ,  $B^1$  and  $B^2$  are in each case a substituent;  $Y^3$  and  $Z^1$  are in each case a group of atoms necessary for the formation of a carbocyclic or heterocyclic ring;  $G^1$  and  $G^2$  are in each case a group of atoms necessary for the formation of a chain having conjugated double bonds;  $Y^1$  is =0,  $=NR^{109}$  or  $=C(CN)_2$ ,  $R^{109}$  being a substituent;  $Y^2$  is =0,  $=NR^{109}$  or  $=C(CN)_2$ , =00 being a

substituent; L is a methine group, which may be substituted, or a group by means of which a polymethine group is completed, it being possible for 3, 5 or 7 methine groups to be connected in order to form a chain having conjugated double bonds, which chain may be substituted, x and y are 0 or 1, M<sup>k+</sup> is an organic or inorganic cation, and k is an integer from 1 to 10

- 8. (currently amended): An optical recording medium comprising a substrate and at least one recording layer, wherein the recording layer comprises a metal complex according to any one of claim [[s]] 1-to 5 or a composition according to claim 6 or 7.
- 9. (cancelled).
- 10. (currently amended): A method of producing an optical recording medium, wherein a solution of a metal complex according to any one of claim [[s]] 1 to 5 or a composition according to claim 6 or 7 in a solvent, especially a non-halogenated solvent, is applied to a substrate having depressions.
- **11.** (new): A method of producing an optical recording medium according to claim 10, wherein the solvent is a non-halogenated solvent.
- **12.** (new): A metal complex according to claim 1, wherein Me is a transition metal of Sub-Group 9, 10 or 11, when R<sup>5</sup> or R<sup>6</sup> is a halogen atom it is fluorine, chlorine or bromine, and when R<sup>5</sup> or R<sup>6</sup> is an ester group it is a phosphonic acid, phosphoric acid or carboxylic acid ester group.
- 13. (new): A metal complex according to claim 2, wherein Me is Cu<sup>2+</sup>.
- **14.** (new): A metal complex according to claim 2, wherein at least one of A<sup>2</sup> and A<sup>3</sup>, is an electron accepting substituent selected from –NO<sub>2</sub>, chlorine, bromine and a group -SO<sub>2</sub>–NR<sup>8</sup>R<sup>9</sup> and the other is a hydrogen atom
- 15. (new): A metal complex according to claim 3, wherein Me is Cu<sup>2+</sup>.
- **16.** (new): An optical recording medium comprising a substrate and at least one recording layer, wherein the recording layer comprises a composition according to claim 6.

- **17.** (new): A method of producing an optical recording medium, wherein a solution of a composition according to claim 6 in a solvent, is applied to a substrate having depressions.
- **18. (new):** A method of producing an optical recording medium according to claim 17, wherein the solvent is a non-halogenated solvent.
- 19. (new): A color filter or printing ink comprising a metal complex according to claim 1.
- 20. (new) A color filter or printing ink comprising a composition according to claim 6.